

**Abstract**

- 5 The invention relates to a simulation method, especially to a method for simulating spatial impressions which are produced by means of an image generator and one or several filter arrays.

The method according to the invention essentially comprises the following steps:

- 10 a) Specification of the geometry of the image generator, b) specification of the geometry of the filter array, c) specification of a spatial arrangement geometry in relation to the image generator and the filter array in a three-dimensional coordinate system (X,Y,Z), d) specification of two monocular positions of observation in front of the said arrangement geometry, e) specification of a combined image containing  
15 bits of partial information from several views  $A_k$  ( $k=1..n$ ) of a scene, f) determination of a first and a second secondary image containing image elements of the specified combined image which are visible to the eye of an observer in the specified first and second monocular position of observation on the basis of the specified filter array geometry in conjunction with the specified image generator geometry and the spa-  
20 tial arrangement geometry, and g) stereoscopic visualization of the first and second secondary images as a left and right stereoscopic image, respectively.